Remarks

Claims 13-15 and 58-59, 61-77 are pending in this application. Claim 60 is canceled in this paper without prejudice to Applicants' right to pursue the subject matter recited by the claim in one or more divisional, continuation, and/or continuation-in-part applications. Applicants note that claims 68 and 70-75 are currently withdrawn from consideration. These claims are not deleted from this application because a request for rejoinder will be filed at an appropriate time. Claim 13 is amended in this paper to remove the recitation of "in need of such treatment or prevention" and "prophylactically effective amount." No new matter has been added.

Applicants respectfully submit that the pending claims are allowable at least for the following reasons.

A. The Rejection Under 35 U.S.C. § 112 Should Be Withdrawn

On pages 3-4 of the Office Action, claims 13-15, 58-59, 61-67, and 69 are rejected as allegedly not enabled. In particular, it is alleged that the methods of "prevention" are not enabled. (Office Action, page 4). Although Applicants respectfully disagree at least for the reasons stated in their Response dated July 5, 2006, claim 13 has been amended to remove the recitation of the terms "prevention" and "prophylactically effective amount." to expedite the prosecution of this application. In view of the amendments, Applicants respectfully request that the rejection of claims under 35 U.S.C. § 112 be withdrawn.

B. The Rejection Under 35 U.S.C. § 103 Should Be Withdrawn

On pages 4-6 of the Office Action, claims 13-15, 58-59, 61-67, 69, and 76-78 are rejected as allegedly obvious over the abstract of Simeon *et al.*, *Canadian Journal of Psychiatry*, 31(6): 581-5 (1986) ("Simeon") in view of U.S. Patent No. 6,274,579 to Morgan *et al.* ("Morgan"). In particular, the Examiner alleges that the claims are obvious based on her assertion that: 1) Simeon teaches that "bupropion shows significant improvements of anxiety, hyperactivity,... conduct disorder, etc." (Office Action, page 4); and 2) although Simeon does not disclose (S,S)-2-(3-chlorophenyl)-3,5,5,-trimethyl-2-morpholinol ("(S,S)-hydroxybupropion"), Morgan discloses that (S,S)-hydroxybupropion is active metabolite of bupropion. (Office Action, page 5). Applicants respectfully traverse this rejection.

First, Applicants respectfully point out that Simeon does not disclose or suggest the treatment of an anxiety disorder using bupropion, contrary to what the Examiner appears to suggest. Simeon reports the results from a clinical trial directed to "children with attention deficit and/or conduct disorders." Although Simeon reports that improvements were allegedly observed for "conduct disorder, anxiety, hyperactivity, muscle tension and psychosomaticism," Simeon refers to them as the symptoms of attention deficit or conduct disorder, but not as independent disorders. In other words, although Simeon may disclose the efficacy of bupropion in alleviating anxiety as a symptom of attention deficit or conduct disorder, it does not disclose or suggest that bupropion may be effective in treating an anxiety disorder, as recited by the claims.[1]

Furthermore, Simeon discloses, referring to several tests performed for evaluation, that "[W]hile no single cognitive test showed a significant improvement, all nine tests changed in the positive." This implies that, when assessed using any single test, bupropion's efficacy in treating even the attention deficit or conduct disorder itself, not to mention a symptom thereof (*i.e.*, anxiety), is insignificant.[2] In view of this uncertainty even with regard to the treatment of attention deficit or conduct disorder itself, it would be far-fetched to conclude that Simeon's report that bupropion may reduce anxiety, as a symptom of attention deficit or conductive disorder, would have suggested bupropion's efficacy in treating an anxiety disorder to those of ordinary skill in the art. For these reasons alone, Applicants respectfully submit that the rejection of the claims should be withdrawn.

In addition, even assuming, *arguendo*, that Simeon somehow disclosed or suggested the use of bupropion for the treatment of an anxiety disorder, Morgan would not have motivated, or suggested to, those of ordinary skill in the art to replace bupropion with (S,S)-hydroxybupropion. In this regard, Applicants respectfully point out that

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[1] As well-settled, The treatment of symptoms associated with a disorder is different from the treatment of the disorder itself. (*See, e.g., Rapoport v. Dement*, 254 F.3d 1053, 1060-1061 (Fed. Cir. 2001) (holding that claims to the treatment of sleep apneas using a compound were not anticipated by or obvious over prior art disclosure of the treatment of symptoms associated with sleep apnea using the same compound, because the reference's mention of the possibility of administering the compound to patients suffering from sleep apnea was "for the purpose of treating [a symptom] in such patients, not for the purpose of treating the sleep apnea disorder itself.")).

[2] Applicants note that Simeon may suggest that the efficacy of bupropion may be significant when all nine tests are considered together. In this regard, Simeon recommends a further double-blinded trial of bupropion.

although Morgan reports that the anti-depressant activity of racemic bupropion is likely to result from (S,S)-hydroxybupropion, it does not provide any motivation to those skilled in the art to replace bupropion with (S,S)-hydroxybupropion in any and all methods where bupropion is used. This is because Morgan fails to disclose that (S,S)-bupropion would be more advantageous than racemic bupropion in any and all instances. For example, Morgan discloses that, while (S,S)-hydroxybupropion "was approximately twice as potent as [racemic bupropion] as an NA inhibitor," it was "approximately 10-fold less potent as an inhibitor of dopamine uptake." (Morgan, col. 7, lines 25-29). Therefore, at most, Morgan merely shows that (S,S)-hydroxybupropion has different, but not necessarily more desirable, pharmacological properties than racemic bupropion. Thus, Morgan sets forth a list of specific disorders against which (S,S)-hydroxybupropion may be used, none of which is a disorder recited by the pending claims. (*See* Morgan, Abstract and col. 2, lines 46-63).[3]

Further in this regard, Morgan also discloses that "the mechanism of action of bupropion, as with other antidepressants, is unknown." (Morgan, col. 1, lines 24-25). Therefore, by disclosing that bupropion's mechanism of action was not well-understood, and that (S,S)-hydroxybupropion has properties merely different than those of bupropion, Morgan certainly does not teach or suggest that (S,S)-hydroxybupropion can replace bupropion in all of the uses contemplated for bupropion, much less in the methods recited by the pending claims. For this additional reason, Applicants respectfully submit that the rejection of the claims should be withdrawn.

Conclusion

For at least the foregoing reasons, Applicants respectfully submit that all of the pending claims are in allowable condition, and thus request that the rejection of the pending claims be withdrawn.

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[3] In this regard, Applicants note that the Examiner appears to allege that Morgan discloses that "other conditions not mentioned [in Morgan]" of bupropion could be attributed to (S,S)-hydroxybupropion. (Office Action, page 5, referring to col. 8, lines 4-15 of Morgan). However, Applicants respectfully point out that a closer reading of Morgan would reveal that "other activities" as indicated in Morgan actually refer to those activities of bupropion, other than anti-depressant activity, which are mentioned in Morgan. (*See* Morgan, col. 8, lines 21-54, wherein bupropion's "expected" efficacy in smoking cessation, obesity, and cocaine addition, all of which are disorders specifically listed in Morgan, is described).

No fee is believed due for this submission. Should any fees be due for this submission or to avoid abandonment of the application, please charge such fees to Jones Day Deposit Account No. 503013.

Respectfully submitted,

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